"To care for him who shall have borne the battle and for his widow and his orphan."

Abraham Lincoln,
Second Inaugural Address

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High-Alert Medications

VA National Center for Patient Safety

High-Alert Medications

NCPS is concerned with high-alert medications because these drugs are defined as having a higher likelihood of causing injury if misused. Some high-alert medications also have a high volume of use, increasing the likelihood that a patient might suffer inadvertent harm. Though medication mishaps with these drugs are no more frequent than other drugs, the consequences can be devastating.

NCPS promotes three principles to improve high-alert medication administration and distribution:

1. Eliminate the possibility of error

- Reduce the number of drugs on a facility's formulary
- Reduce the number of concentrations and volumes
- Remove high-alert drugs from critical areas

2. Make errors visible

- Have two individuals independently check the product to insure it is correct, and communicate the results to each other. This is of particular importance when medications are received in bulk (In this case, the packaging and labeling could misleadingly look similar to another drug).
- Have two individuals independently check equipment settings, and communicate the results to each other. Checking equipment settings may not always be applicable, since some drugs are administered intravenously

3. Minimize the consequence of errors

- Minimize the size of vials or ampoules in the patient care area to the dose commonly needed
- Reduce the total dose of high-alert drugs in continuous IV drip bags
- Reduce the concentration of the drugs when possible

Fostering change in the way high-alert drugs are managed based on these principles includes such things as encouraging standardized dosing procedures, carefully screening new products and creating system redundancies, commonly know as "double checks."

This approach to managing high alert medications is another aspect of NCPS' effort to develop a culture of safety throughout the VA healthcare system.

Our program is based on a systems approach to problem solving that focuses on prevention, not punishment. We use human factors engineering methods and apply ideas from "high reliability" organizations, such as aviation and nuclear power, to target and eliminate system vulnerabilities.

For more information and a list of high alert medications, consult page size of the December 2002 issue of TIPS, the bimonthly NCPS safety publication: *www.patientsafety.gov/TIPS Dec02.pdf*.

For further information, read *Medication Errors* by Michael Cohen, or visit the Web site for the Institute of Safe Medication Practices: *www.ismp.org*